

HU:MGSDVRDLNALLPAVPSLGGGGGCLPVS GAAQWAPVLDFA PPGASAYGSL
MO:MGSDVRDLNALLPAVSSLGGGGGCLPVS GAAQWAPVLDFA PPGASAYGSL

HU:GGPAPPPAPPPPPPPPPH SFIKQEPSWGGAE PHEEQCLSAFTVHFSGQFTGTAG
MO:GGPAPPPAPPPPPPPPPH SFIKQEPSWGGAE PHEEQCLSAFTLHFSGQFTGTAG

HU:ACRYGPF GPPPPSQASSGQARMFPNAPYLPS CLESQPAIRNQGYSTVTFDGTPS
MO:ACRYGPF GPPPPSQASSGQARMFPNAPYLPS CLESQPTIRNQGYSTVTFDGAPS

HU:YGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSC TG
MO:YGHTPSHHAAQFPNHSFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSC TG

HU:SQALLLRTPYSSDNLYQMTSQLECM TWNQMNLGATLKGVAAGSSSSSVKWTE
MO:SQALLLRTPYSSDNLYQMTSQLECM TWNQMNLGATLKGMAAGSSSSSVKWTE

HU:GQSNHSTGYESDNHTTPI LCGAQYRIHTHG VFRGIQDVRRVPGVAPTLVRSAS
MO:GQSNHGIGYESDNHTA P I LCGAQYRIHTHG VFRGIQDVRRVSGVAPTLVRSAS

HU:ETSEKRPFMCAYPGCNKRYFKLSHLQMH SRKHTGEKPYQCDFKDCERRFSR
MO:ETSEKRPFMCAYPGCNKRYFKLSHLQMH SRKHTGEKPYQCDFKDCERRFSR

HU:SDQLKRHQRRHTGVKPFQCKTCQRKF SRSDHLKTHTRTHTGKTSEKPFSCR
MO:SDQLKRHQRRHTGVKPFQCKTCQRKF SRSDHLKTHTRTHTGKTSEKPFSCR

HU:WPSCQKKFARSDELVRHENMHQRNMTKLQ LAL
MO:WESCQKKFARSDELVRHENMHQRNMTKLH VAL

FIG. 1



FIG. 2

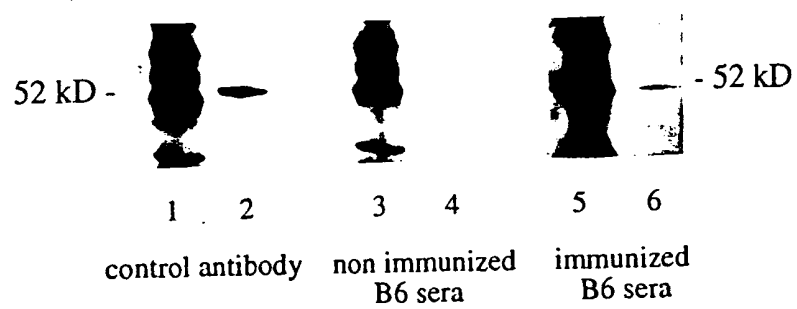


FIG. 3

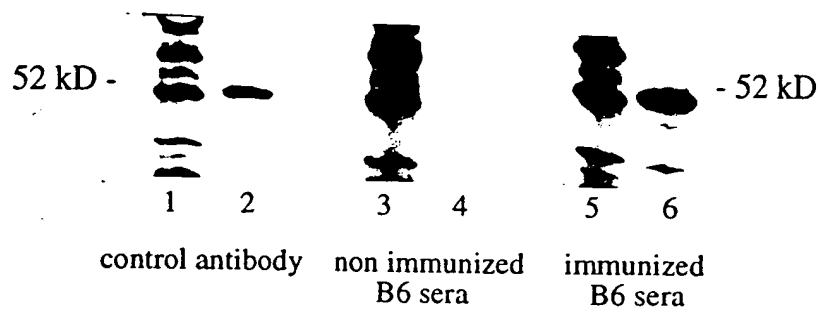


FIG. 4

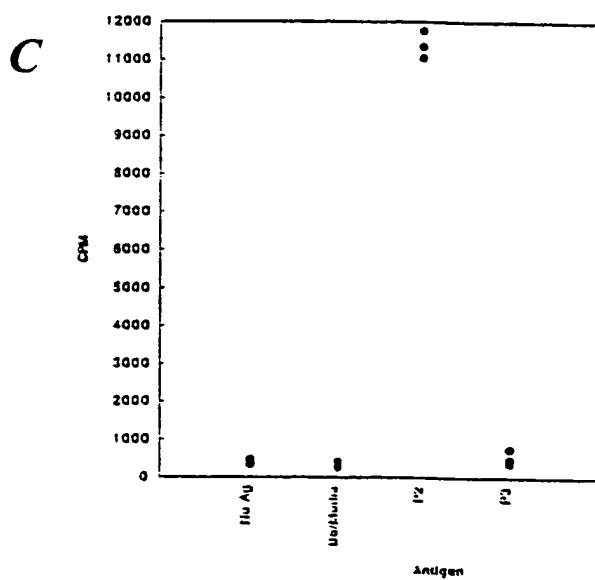
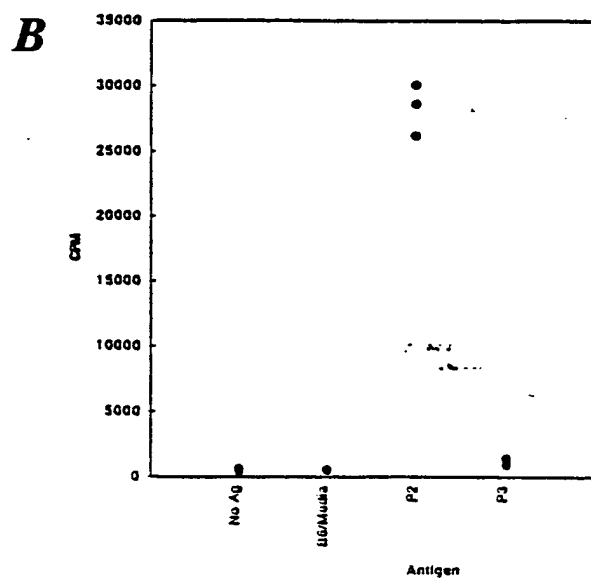
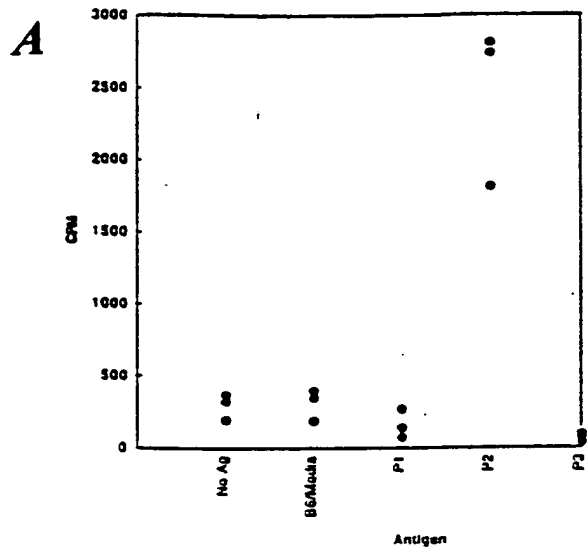
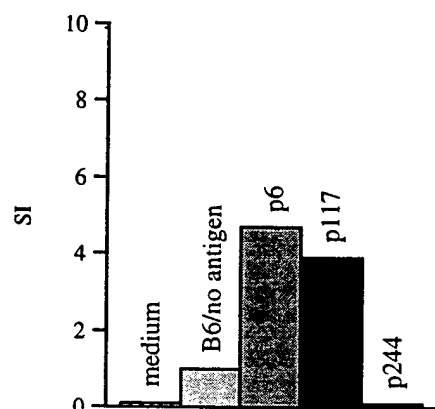


FIG. 5A-5C

A Vaccine A stimulated line



B Vaccine B stimulated line

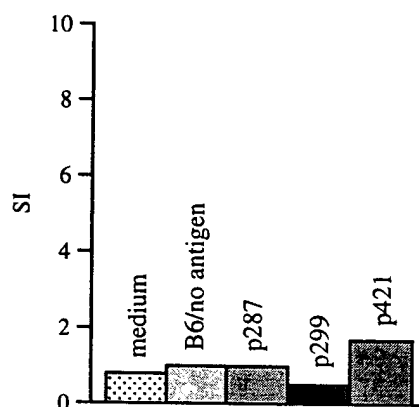
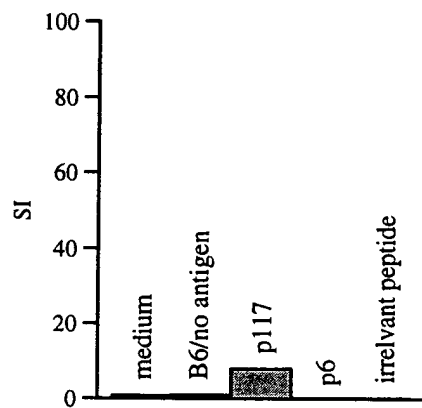
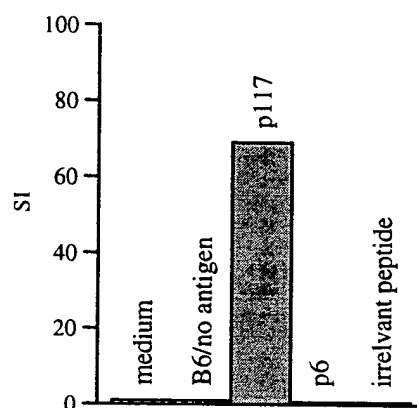


FIG. 6A and 6B

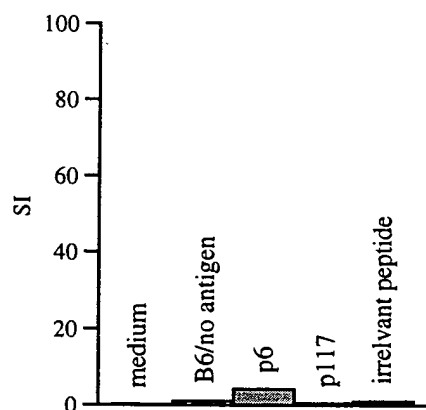
A p117-139 stimulated line



B p117-139 stimulated clone



C p6-22 stimulated line



D p6-22 stimulated clone

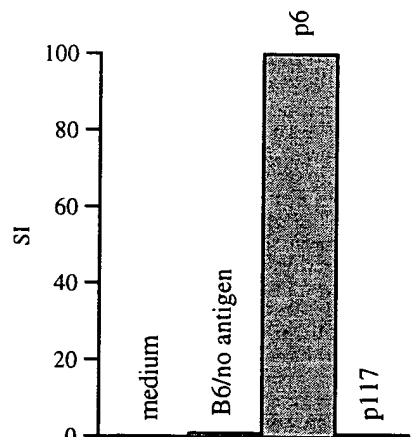


FIG. 7A-7D

```

5   10   15   20   25   30   35   40   45   50   55   60   65   70   75
MGSDVRLNALLPAVPSLGGGGGCGALPVSGAAQWAPVLDFAPPGASAYGSLGGPAPPPAPPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....
.....
.....

80  85  90  95  100  105  110  115  120  125  130  135  140  145  150
PSWGGAEPEEQCLSFTVHFSGQFTGTAGACRYGPFPPPPSQASSGQARMFPNAPYLPSCLESQPAIRNQYS
.....AAA.....AAAA.....AAA.....AAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....
.....

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGTSPSYGHTPSHHAAQFPNHSEFKHEDPMGQQGSLGEQQYSVPPPVYGCHTPTDSCGTGSQALLLRTPYSSDN
.....AAAA.....AAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDDDD.....
.....

230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECMTNQMNLGATLKGVAAGSSSSSVKWTGQSNHSTGYESDNHTTPILCGAQYRIHTHGVRGIQDV
AAAAAAAA.....AAA.AAA.....AAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDDDD.....
.....dddd.....

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVPGVAPTLVRSASETSEKRPFCAYPGCNKRYFKLSHLQMSRKHTGEKPYQCDKDCERRFSRSDQLKRHQR
AAAAA.AAAAAAAAAA.....AAAA.AAAAAAAAAA.
.....RRRR.....RRRR.....
.....DDDDDD.....
.....

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRSDHLKTHTRTHGKTSEKPFSCRWPSCQKKFARSDELVRHHNMHQRNMTKLQLAL
.....AAAA.AAAA.AA.....AAAA.....AAA.....AAAAAA.....AAA.....
.....RRRR.RRRR.....
.....
.....ddddddddd.....

```

FIG. 8A


```

5   10  15  20  25  30  35  40  45  50  55  60  65  70  75
MGSDVRDLNALLPAVSSLGGGGGCLPVSGAAQWAPVLDFAPPGASAYGSLGGPAPPPAPPPPPPPPHSFIKQE
.....AAAAAAAAAAAAAAAA.....AAAAA.....AAAAAAAAAAAA.....
.....RRRR.....
.....

80  85  90  95  100 105 110 115 120 125 130 135 140 145 150
PSWGGAEFHQQCLSAFTLHFSGQFTGTAGACRYGPFPPPSQASSGQARMFPNAPYLPSCLESQPTIRNQYS
.....AAAA.....AAA.....AAAAA.....
.....RRRR.....RRRR.....
.....DDDDDDDD.....

155 160 165 170 175 180 185 190 195 200 205 210 215 220 225
TVTFDGAQSYGHTPSHHAAQFPNHSFKHEDPMGQCGSLGEQQYSVPPVYGCHTPTDSCSGSALLLTPYSSDN
.....AAAA.....AAAAA.....AA
.....RRRR.....
.....DDDDDDDDDDDDDD.....

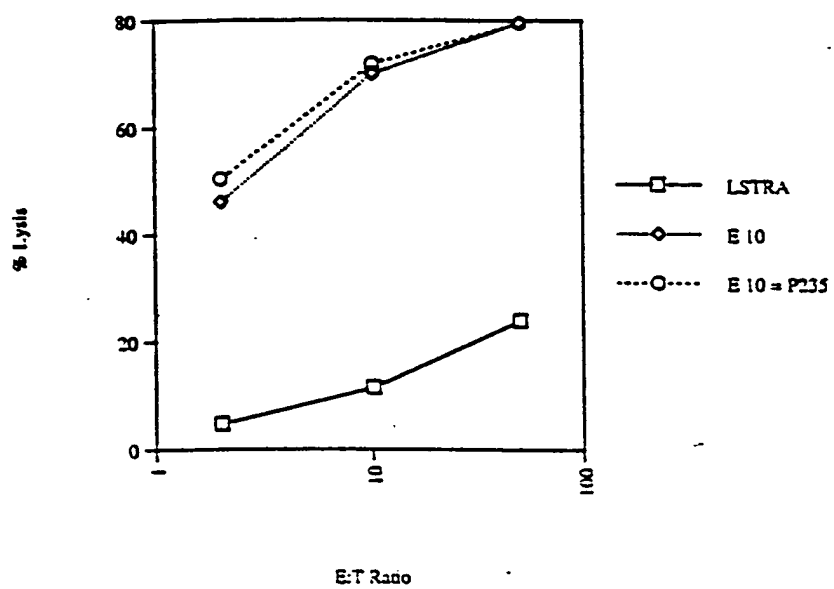
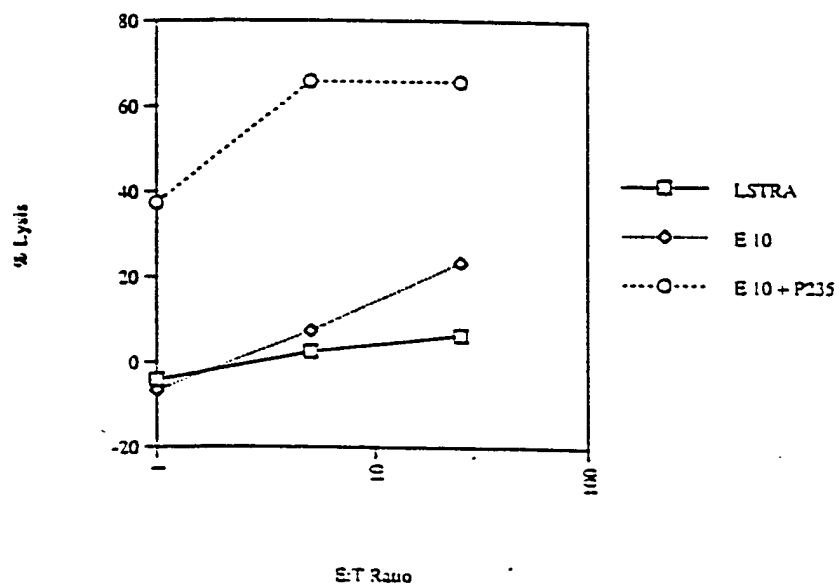
230 235 240 245 250 255 260 265 270 275 280 285 290 295 300
LYQMTSQLECMTNQMNLGATLKGMAAGSSSVKWTESQSNHGIGYESDNHTAPILCGAQYRIHTHGVERGIQDV
AAAAAAAA.....AAA.AAA.....AAAAAAAAA
.....RRRRRRRRRR.....RRRR.....RRRR.....
DDDDDD.....DDDDDDDDDDDD.....
.....dddd.....

305 310 315 320 325 330 335 340 345 350 355 360 365 370 375
RRVSGVAPTLVRSASETSEKRPFMCAYPGCNKRYFKLSHLQMSRKHTGEKPYQCDKDCERRFSRSDQLKRHR
AAAAA.AAAAAA.....AAAAA.....AAAA.AAAAAA
....RRRR.....RRRR.....
..DDDDDDDDDD.....

380 385 390 395 400 405 410 415 420 425 430 435 440 445 450
RHTGVKPFQCKTCQRKFSRSDHLKTHTRTHGKTSEKPFSCRWHSCQKKFARSDELVRHHNMHQRNMTKLHVAL
.....AAAA.AAAA.AA.....AAAA.....AA.....AAAAA.....AAAA.....
.....RRRR.RRRR.....
.....
.....dddddddddd.....

```

FIG. 8B

A**B****FIG. 9A and 9B**

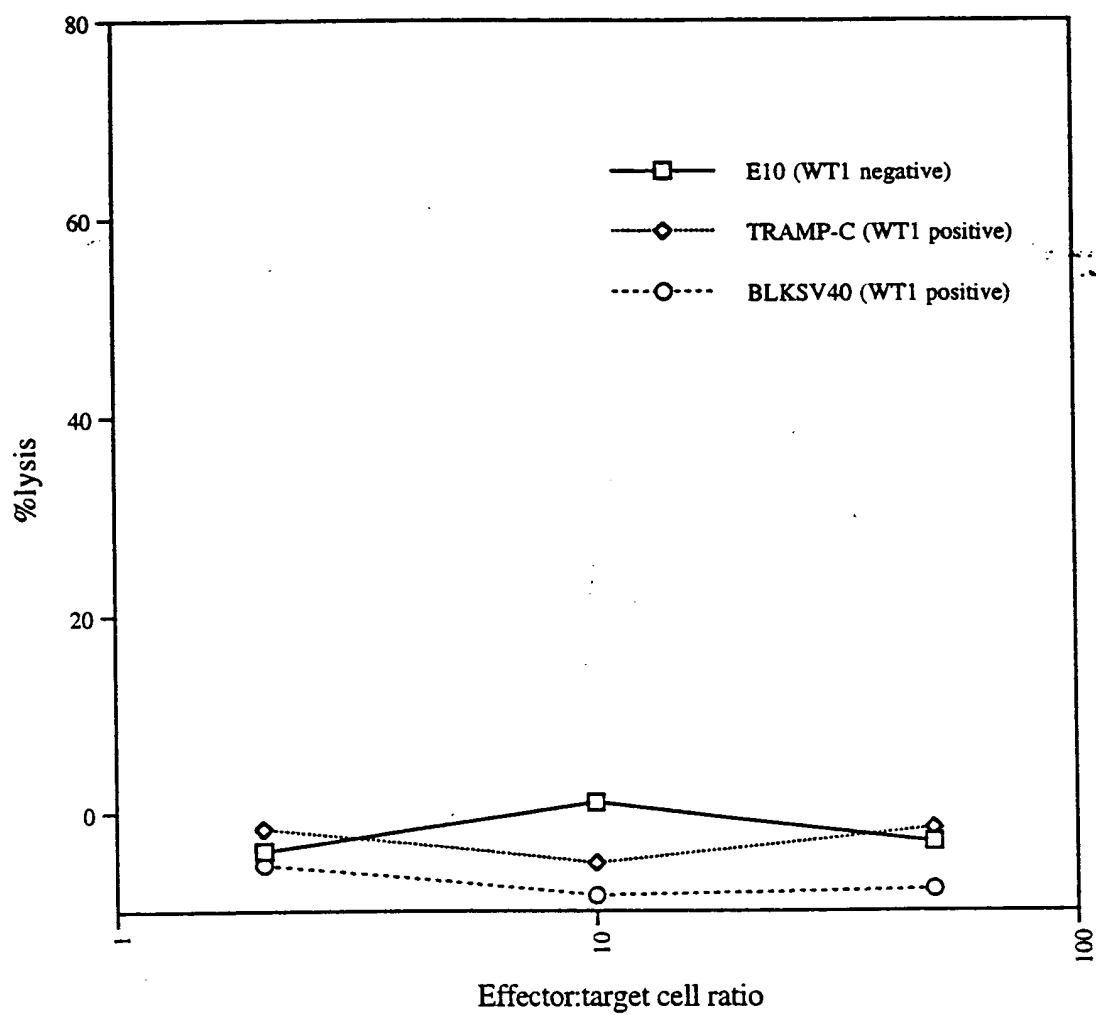


FIG. 10A

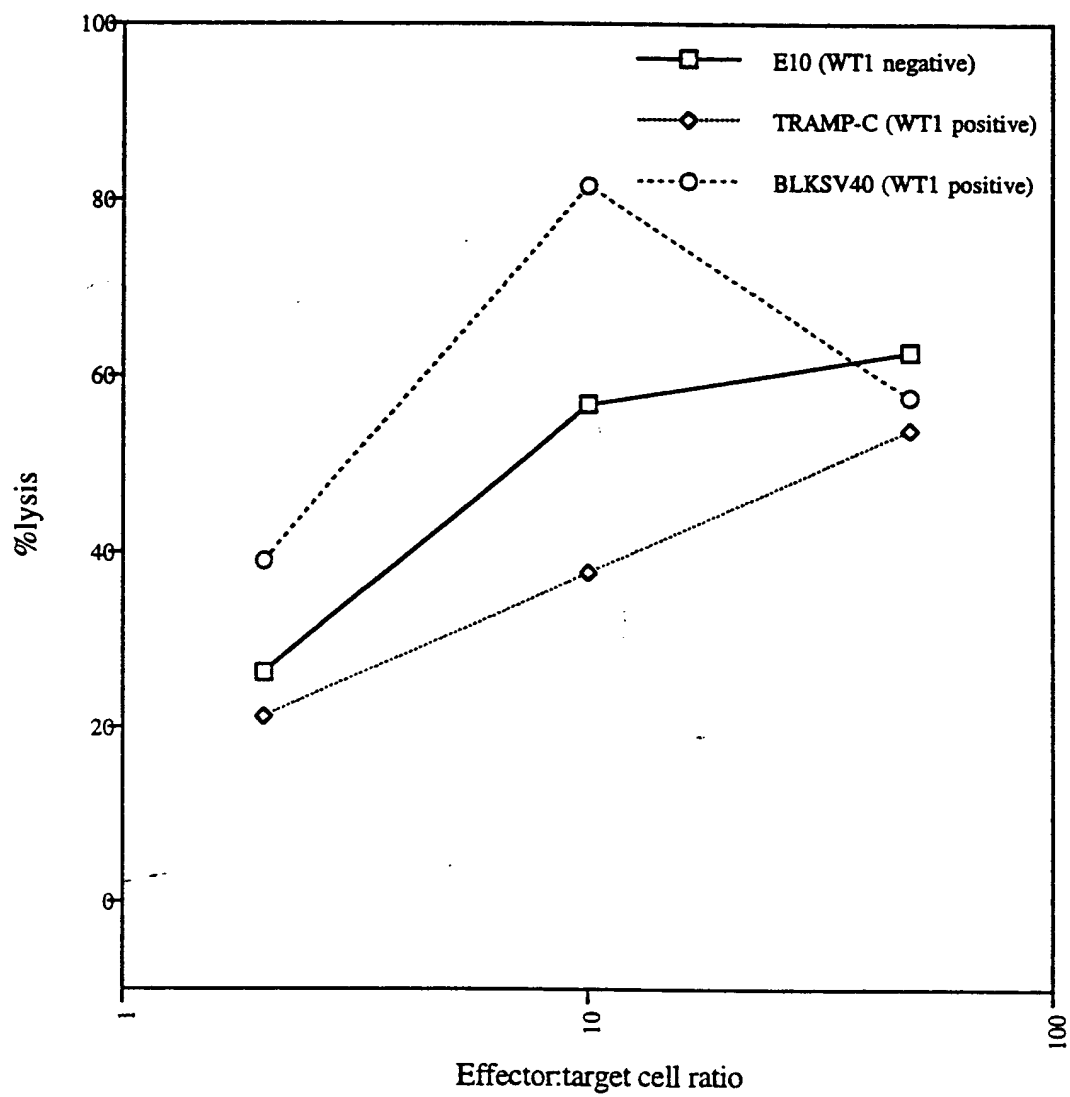


FIG. 10B

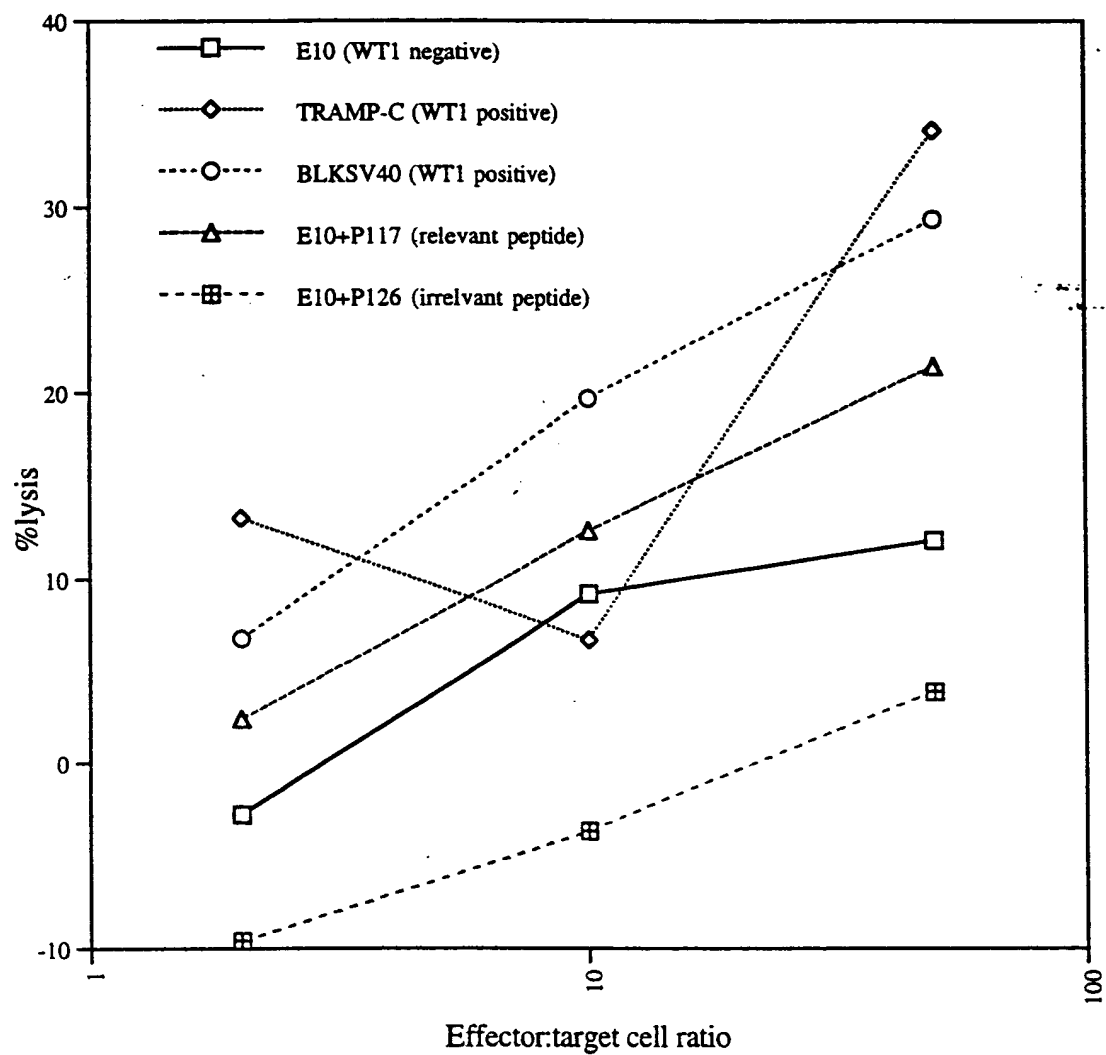


FIG. 10C

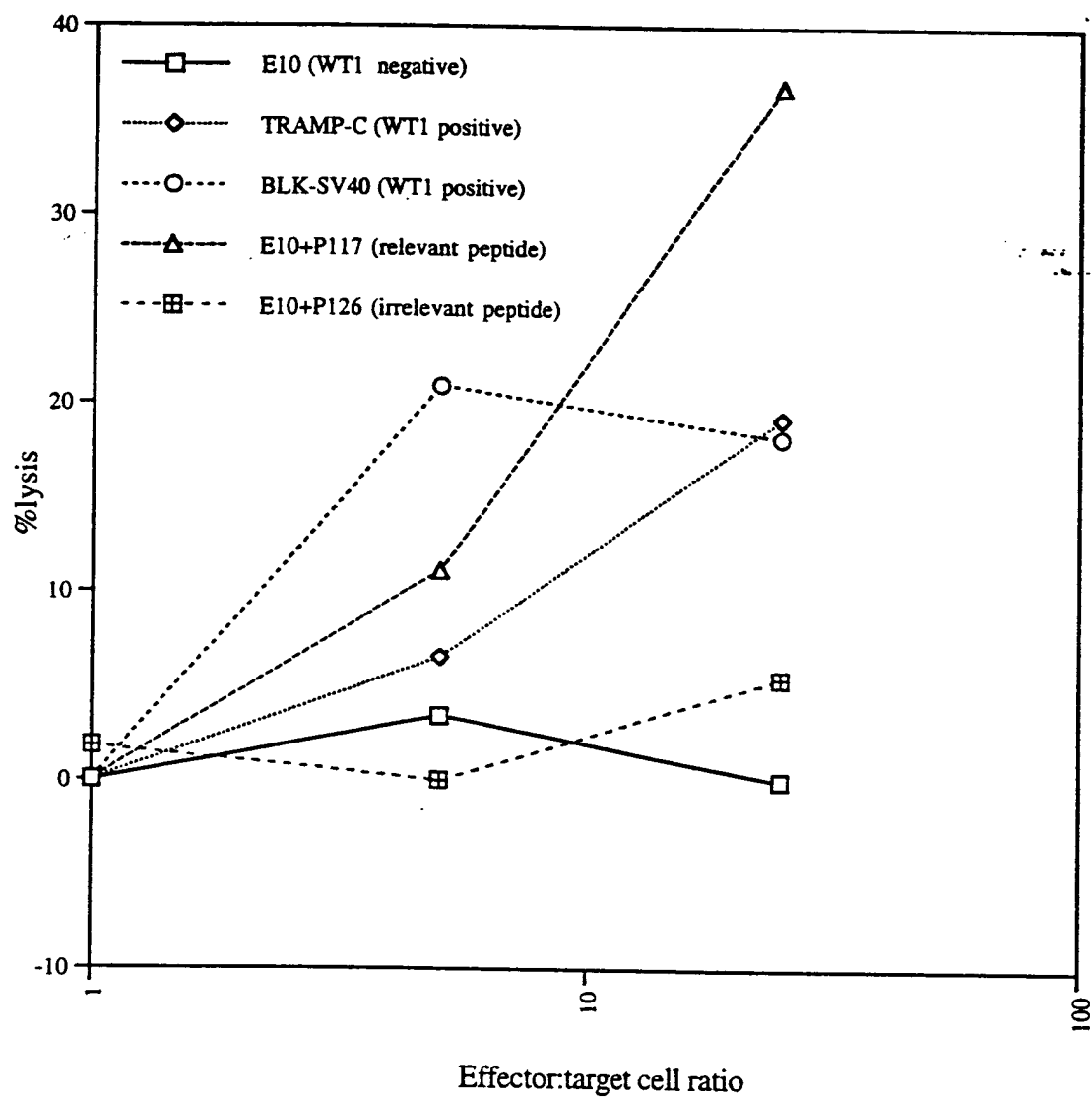


FIG. 10D

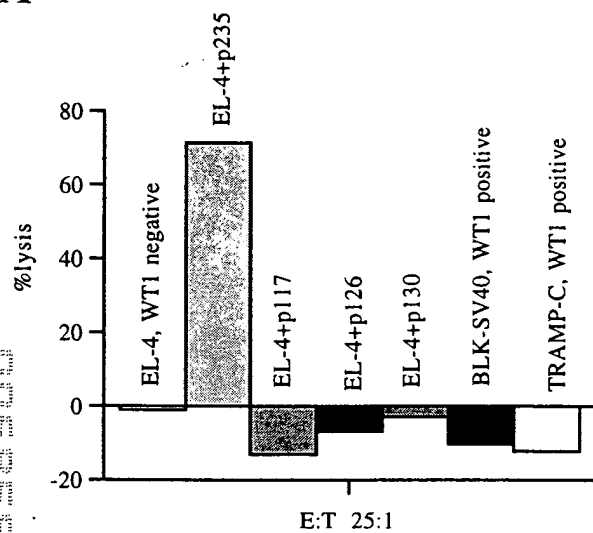
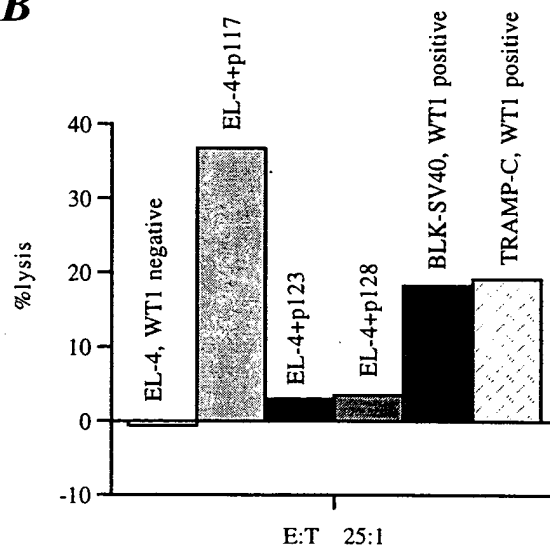
A**B**

FIG. 11A and 11B

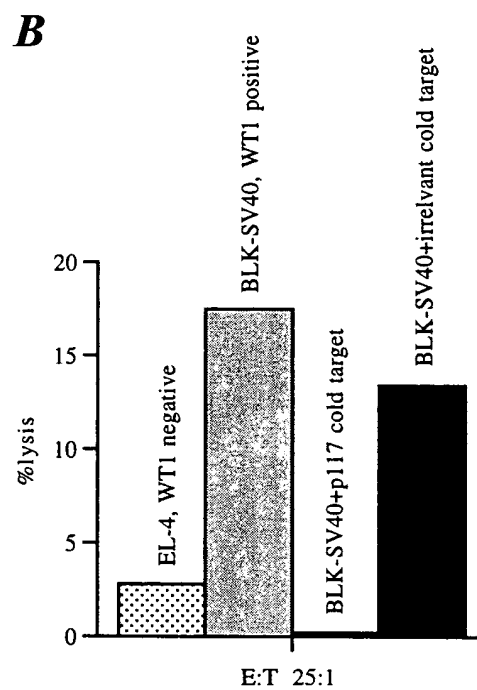
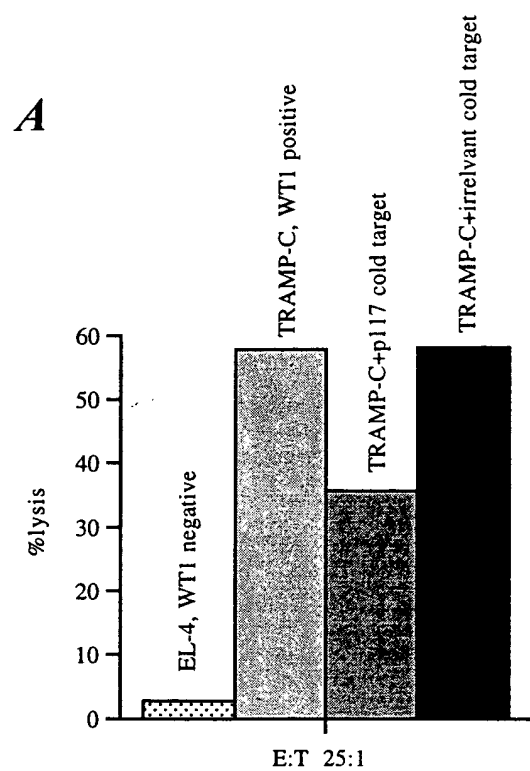
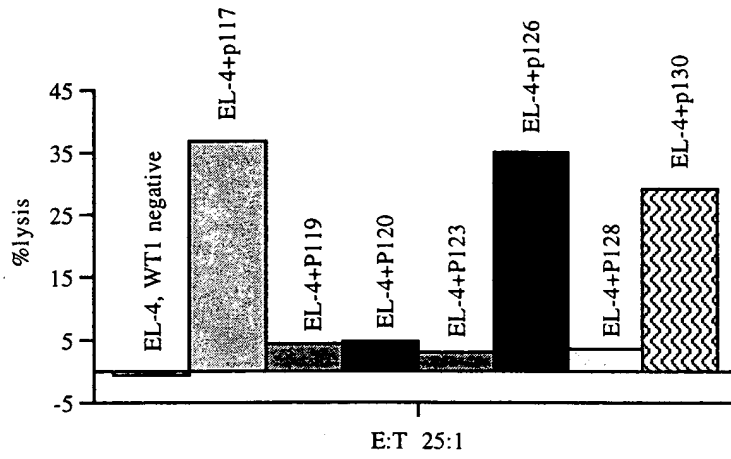
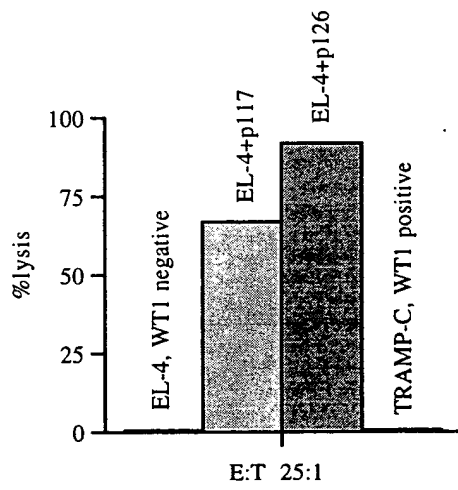
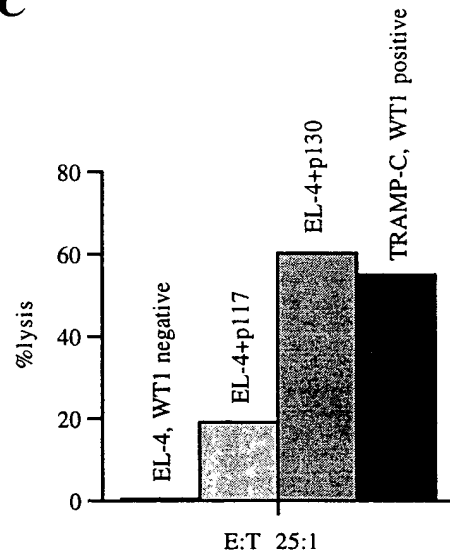


FIG. 12A and 12B

A**B****C****FIG. 13A-13C**

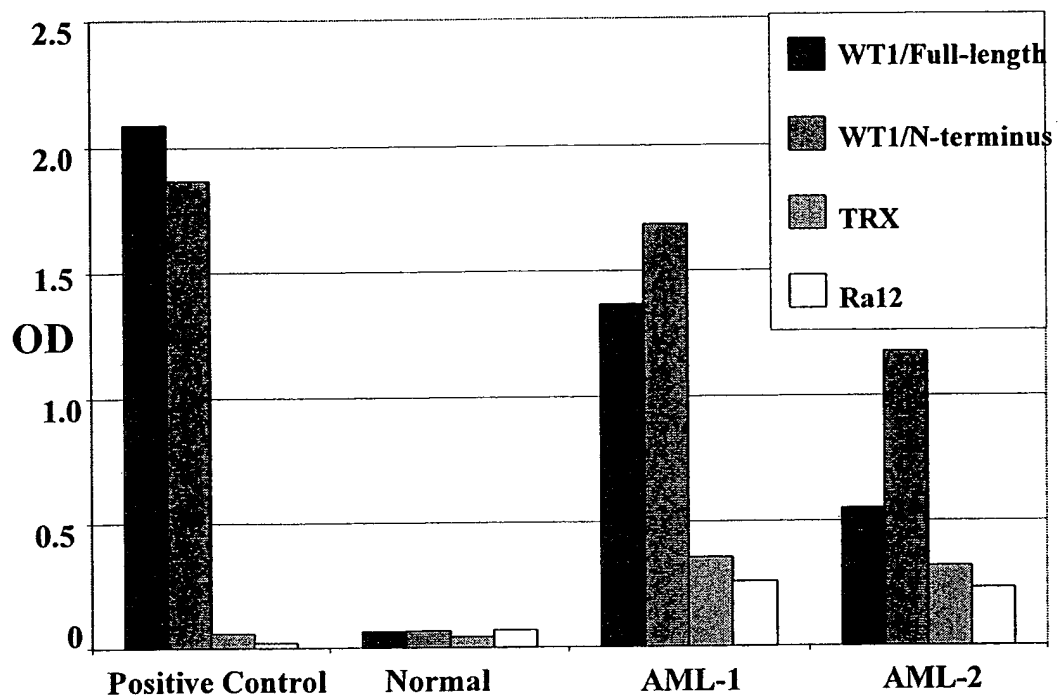


Fig. 15

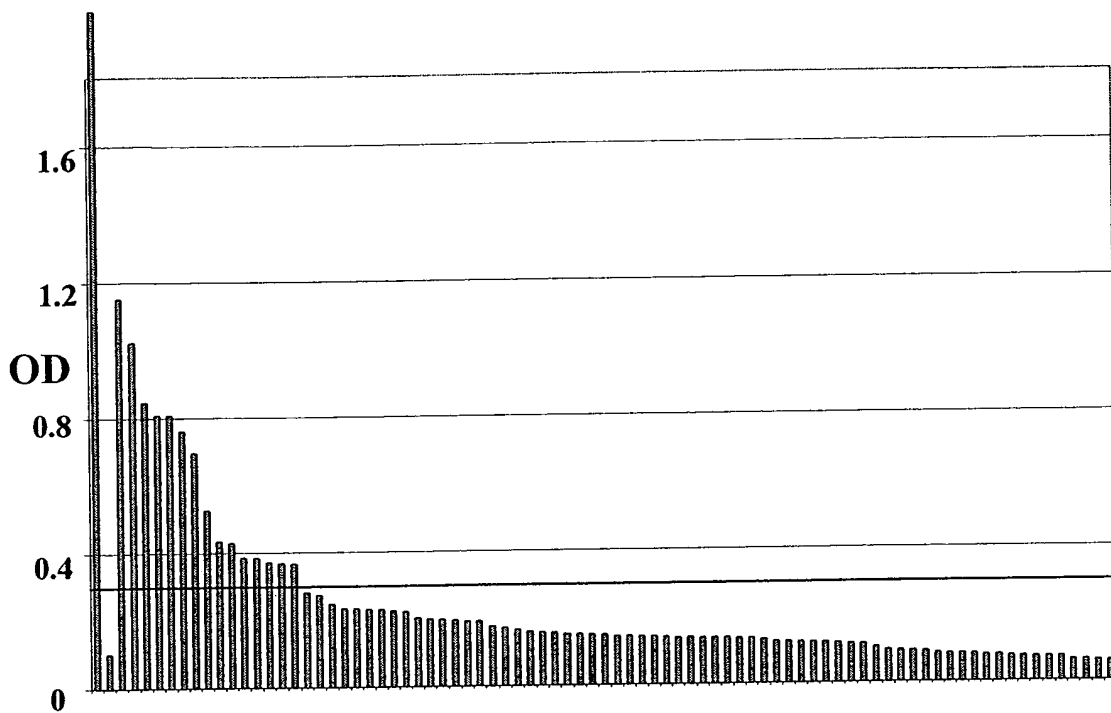


Fig. 16

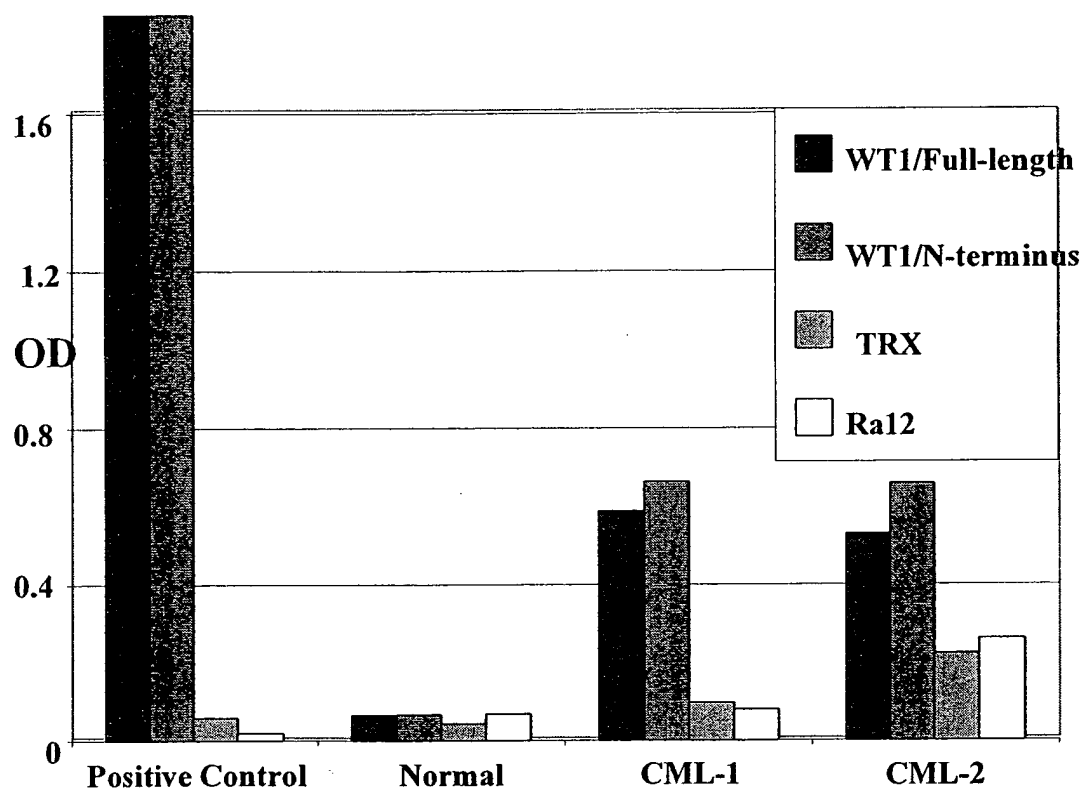


Fig. 17

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TABLE 1: Characteristics of Recombinant WT1 Proteins Used for Serological Analysis

<u>Name</u>	<u>Recombinant Protein</u>	<u>WT1 Amino Acid Position</u>	<u>Molecular Weight</u>
WT1/full-length	Ra12-WT1 full length fusion protein	aa 1-449	85kDa
WT1/N-terminus	TRX-WT1 N-terminus fusion protein	aa 1-249	60kDa
WT1/C-terminus	WT1 C-terminus protein	aa 267-449	50kDa

Fig. 18